



# Overview of presentation

Triodos  Facet

## **Microfinance, entrepreneurship and clean energy;** *Business models and experiences*

1. Introducing Triodos Facet
2. Energy supply chains and microfinance
3. MFIs in energy projects
4. Discussion

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# Triodos Facet

## Sustainable SME development

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### Triodos Facet

- Consultancy services for sustainable SME development
- Based in eco-office in Zeist, Netherlands
- 35 staff worldwide
- FACET BV established in 1990
- Since June 2007, Triodos Facet, member of Triodos group



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# World-wide services

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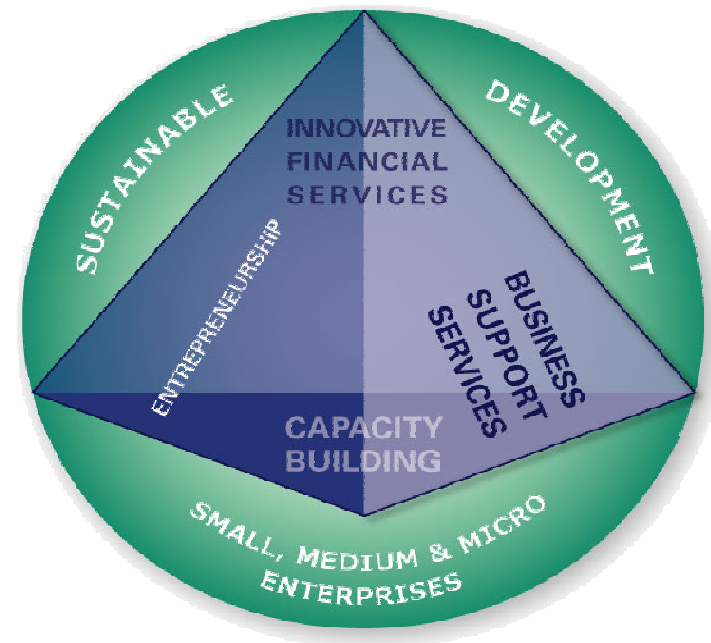


# Fields of expertise


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## SME's for sustainable development

- Sustainable Development (SD)
- Entrepreneurship (EDP)
- Diversified Financial Services (DFS)
- Business Development Services (BDS)



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Food and  
energy  
chains

# Business Development Services

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## ***Services that allow SMEs to grow and innovate***

### *Current energy projects:*

- Building business support capacity with EASE network of energy NGOs in Bolivia, Tanzania, Senegal and Mali
- Support market introduction of Philips Lighting in Sub Sahara Africa
- Energy efficiency for SMEs in urban Vietnam

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# 12 African countries/Philips and DGIS

## SESA

*Market introduction support to Philips Lighting*

### Project activities:

- Support development of PL rural distribution and sales network
- Training, incentive schemes, microfinance, saving schemes, after sales services



ALFA - Affordable Lighting For All

Save for your solar  
light! Buy on credit!

Solar saves money and gives bright light!  
Make your day more productive!

Quality products NOW available!  
One year warranty on quality products only!



No more kerosine







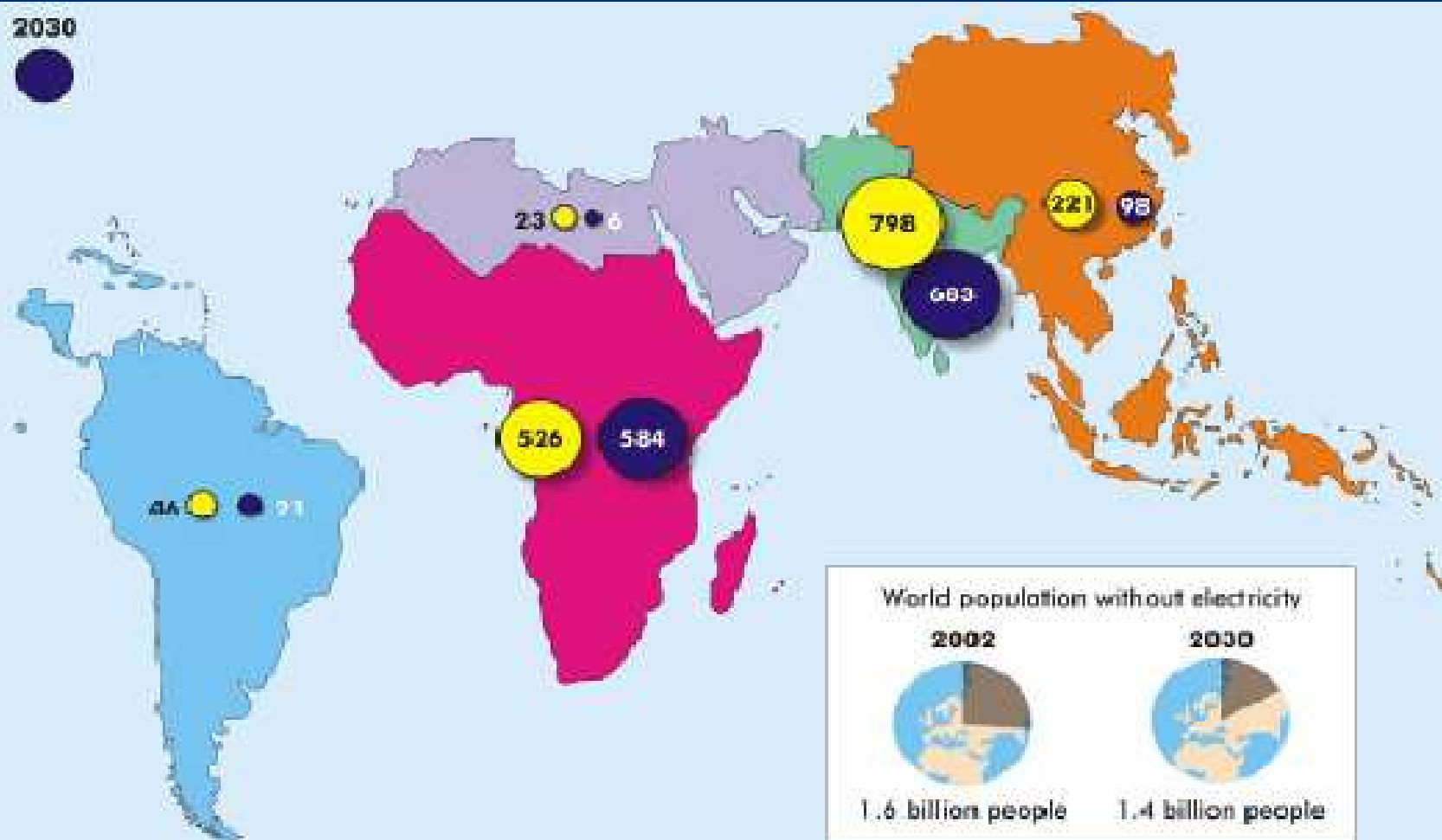
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# Electricity deprivation (source: IEA)

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2002 2030





# Energy markets

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## *Market size:*

- Energy: 7% to 30% of rural household expenses
- Total market kerosene in Africa: 40 BLN USD /year
- 10-20% ? uses car batteries (1 USD per weekly charge)

## *Challenges:*

- Limited (market) infrastructure, low cash income, dispersed rural clients,
- ...

## *Conclusion:*

Huge market, difficult to approach

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# MFI experience mainly in SHS

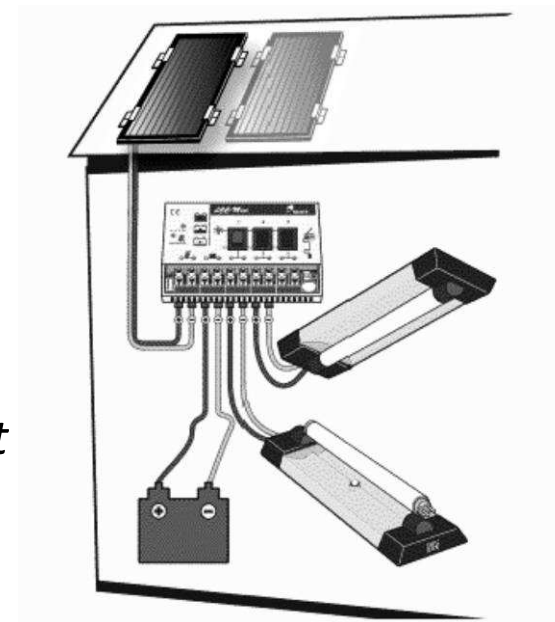
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Solar Home System (SHS):

Panel + (regulator) + battery

- powers: Lights, Radio, TV, phone, (fridge)
- Price range: 100-1000 USD  
*(payback can be as low as 1 year)*
- *New: LED lights -> smaller panel -> reduces cost of system*

*Other products are: solar lanterns, biogas, cookstoves, generators*



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# MFI experience in SHS

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- Repayment depends on regular debt collection, responsive after sales service and proper consumer education on system capabilities and limitations.
- Issues with partnering energy companies not living up to expectations (*no stock available, long lead times to installation*)
- Potential role of MFI is context specific -> *business models*

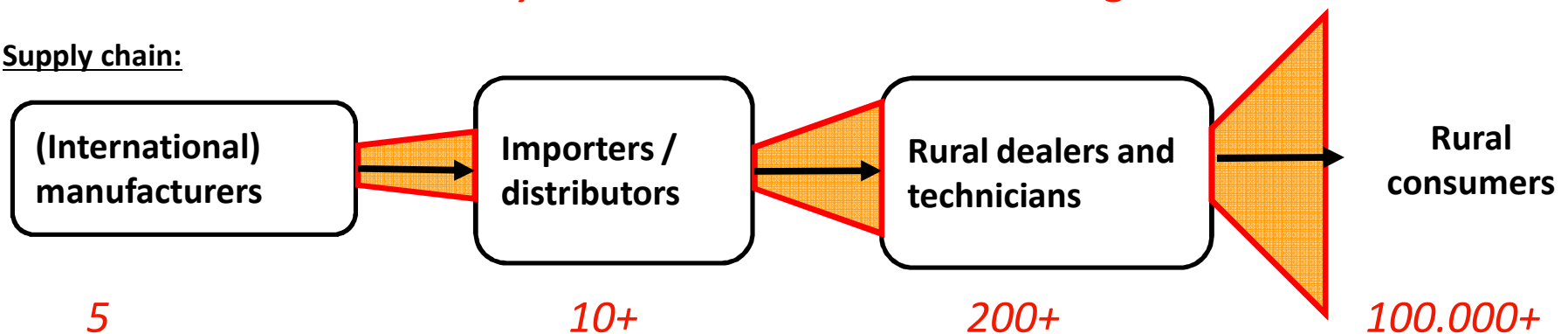
# Commercial supply chains

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## Solar supply chain

*Many transactions to reach huge numbers*

Supply chain:

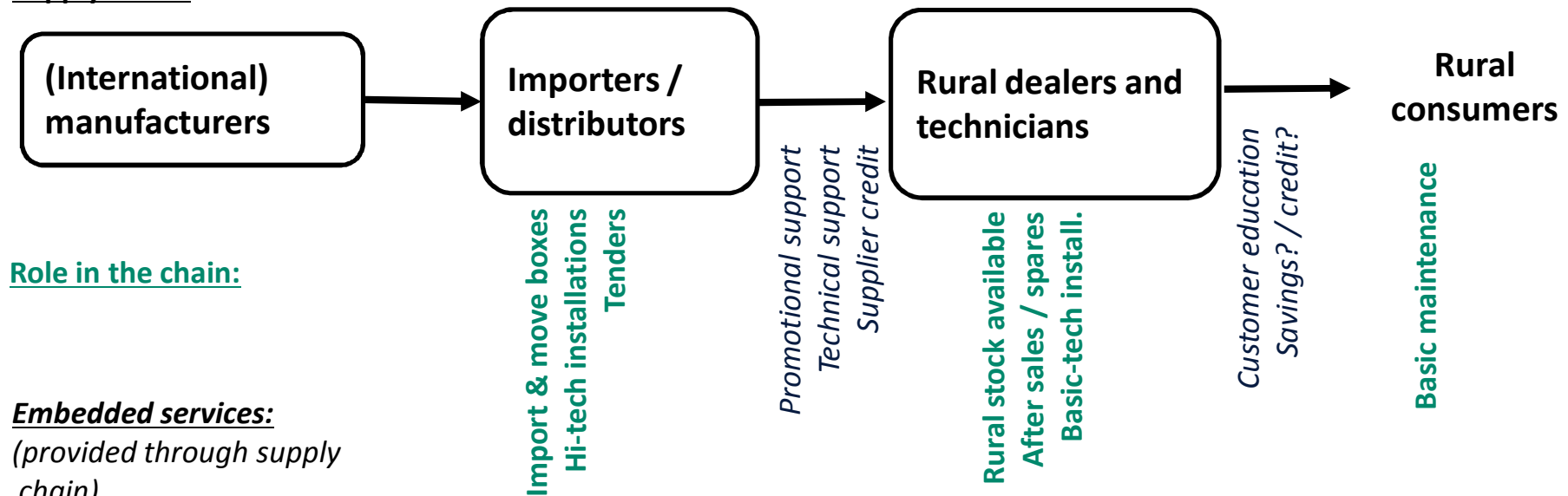


# Solar supply chain

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## Roles and embedded services

### Supply chain:



### Embedded services:

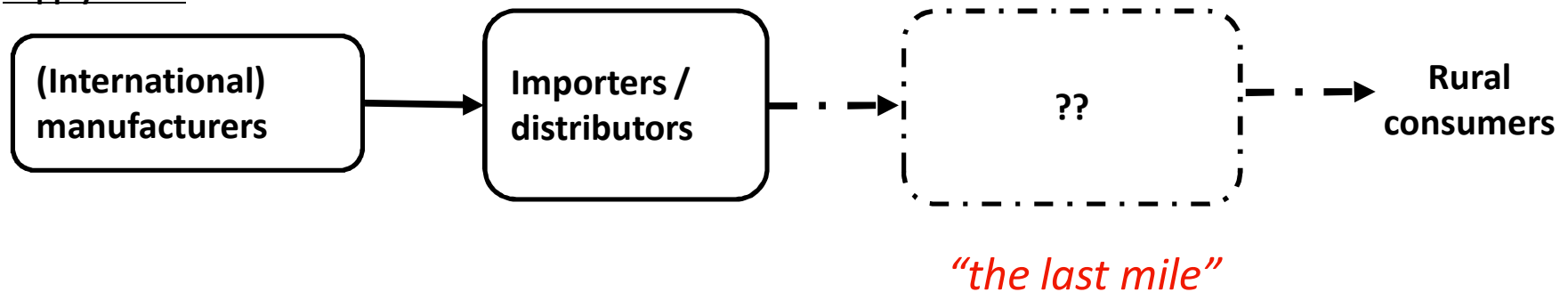
(provided through supply chain)

# Business models

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## Gaps in supply chain

Supply chain:

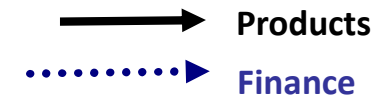




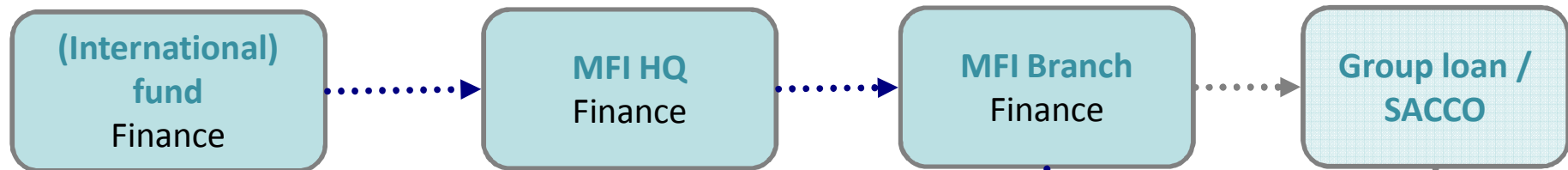
# Business models

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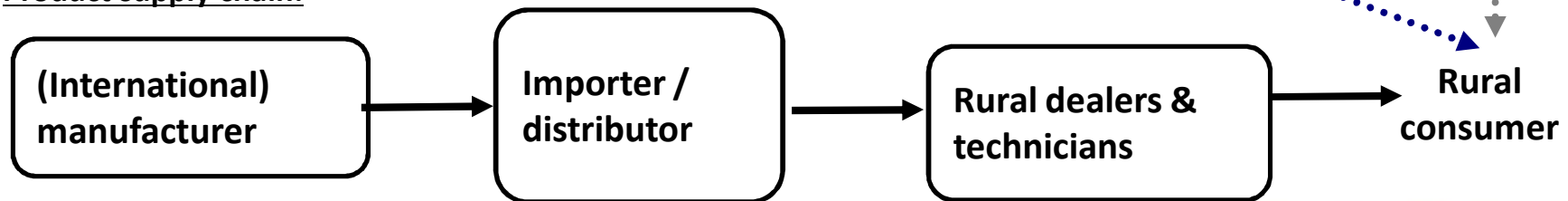
## Supply chain and finance chain



### Finance chain:



### Product supply chain:



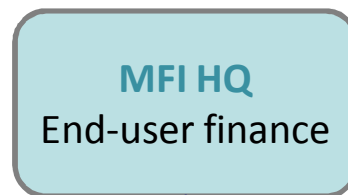
# Business models

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## “Leasing” model, v1

Finance channeled through lead firm

MFI:



Supply chain:



Rural consumer

*Loan administration?*

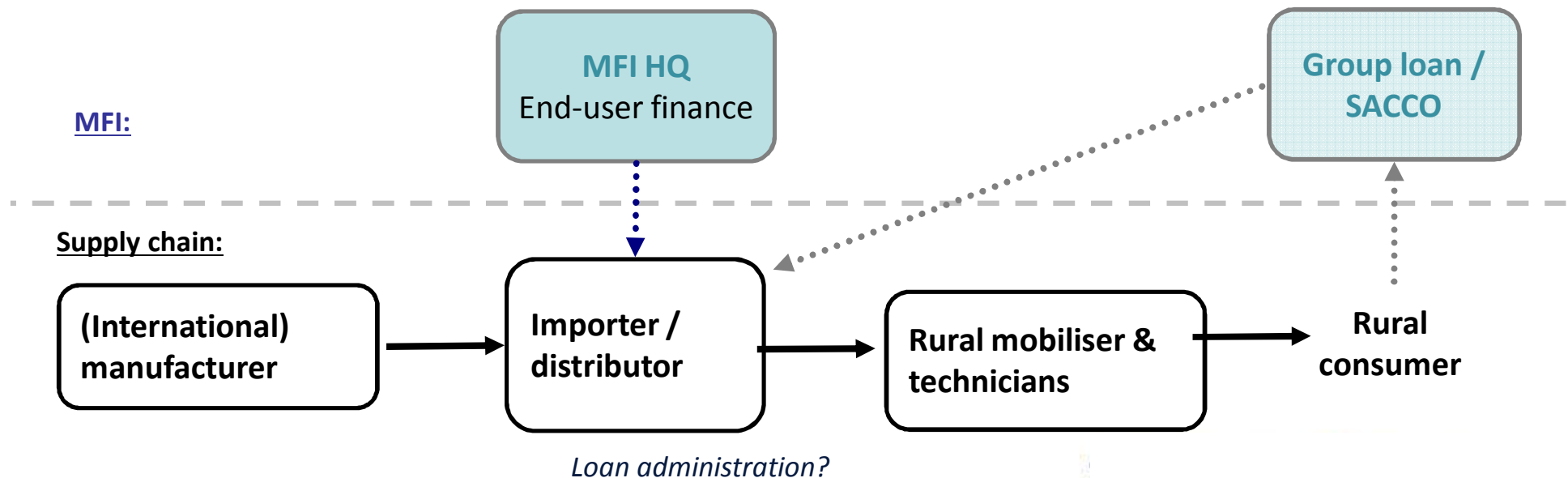


# Business models

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## “Leasing” model, v2

Group loans channeled through lead firm

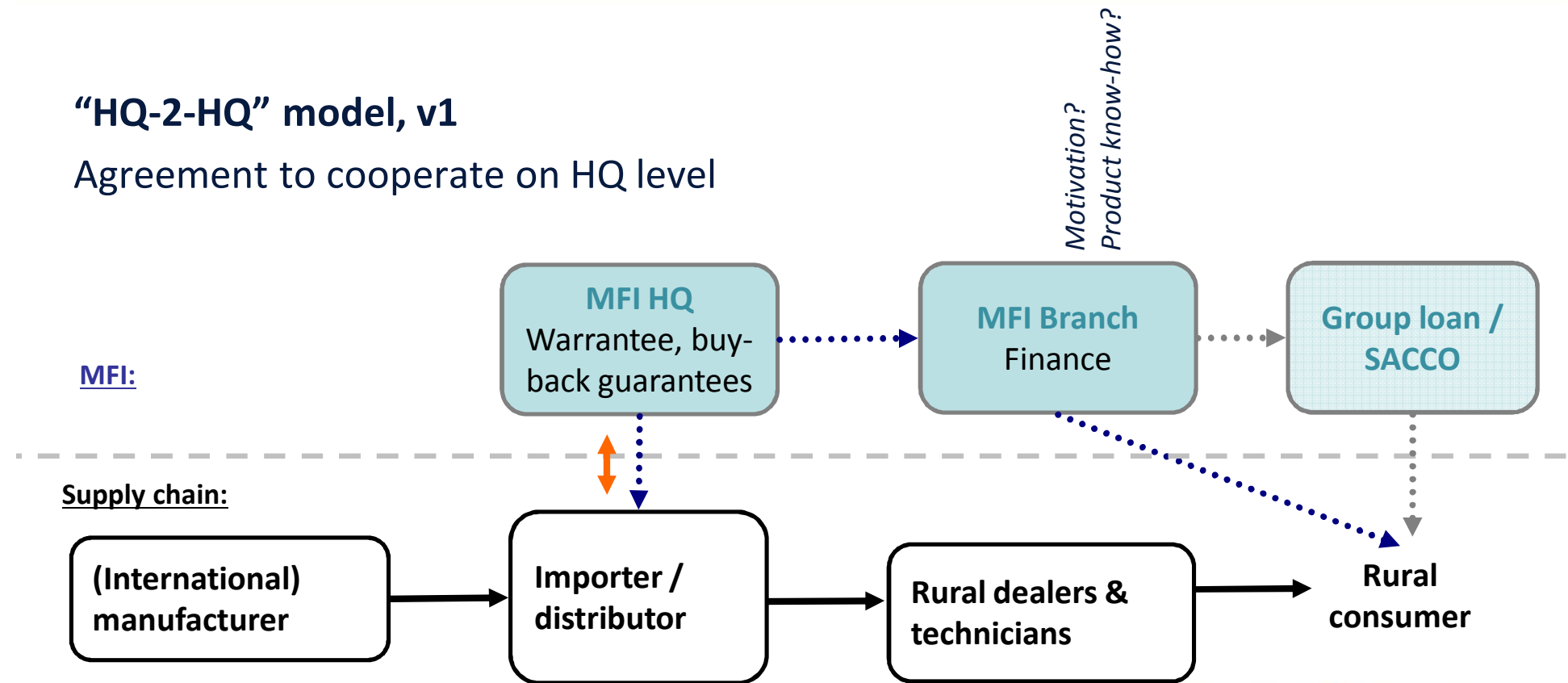


# Business models

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## “HQ-2-HQ” model, v1

Agreement to cooperate on HQ level

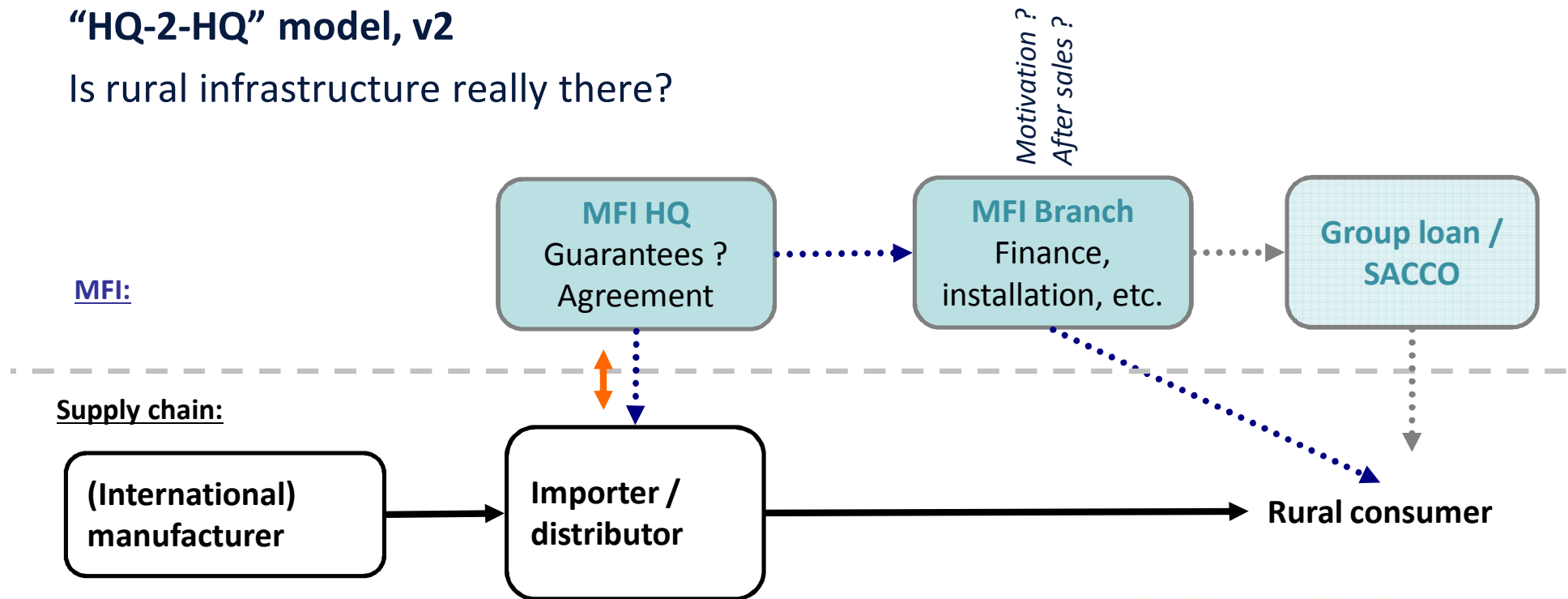


# Business models

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## “HQ-2-HQ” model, v2

Is rural infrastructure really there?

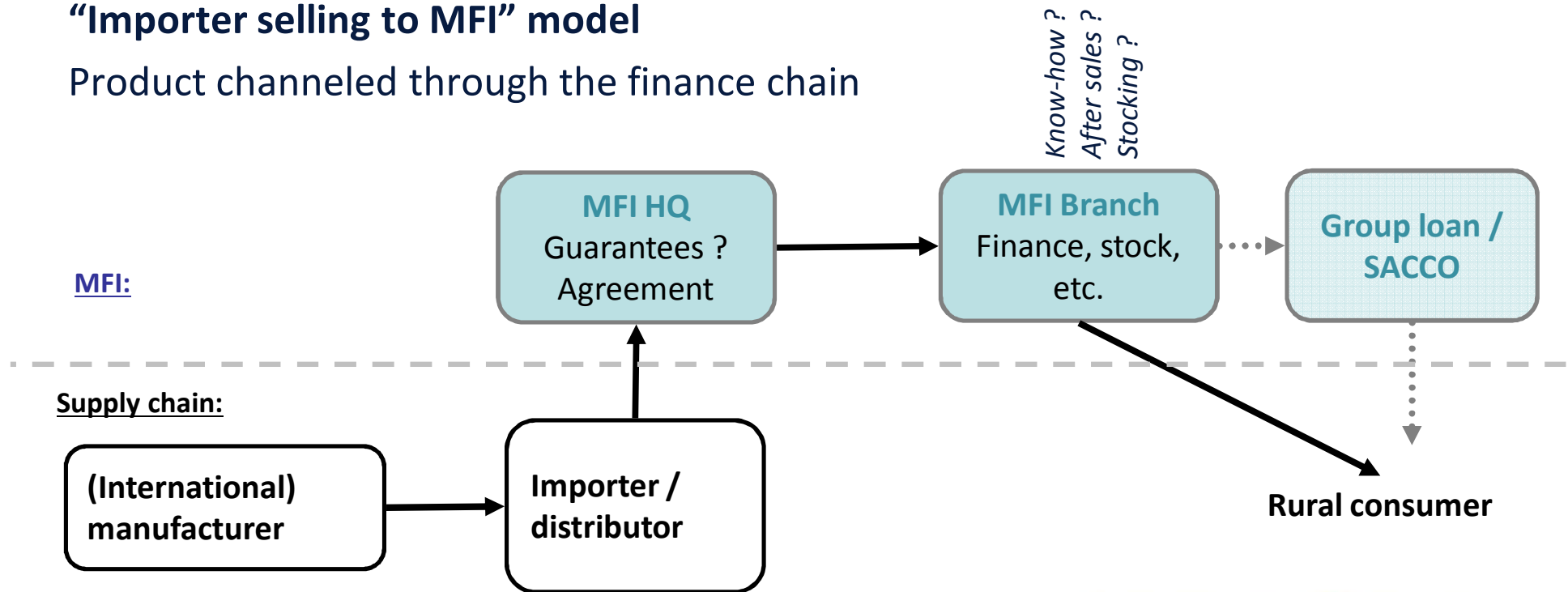


# Business models

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## “Importer selling to MFI” model

Product channeled through the finance chain

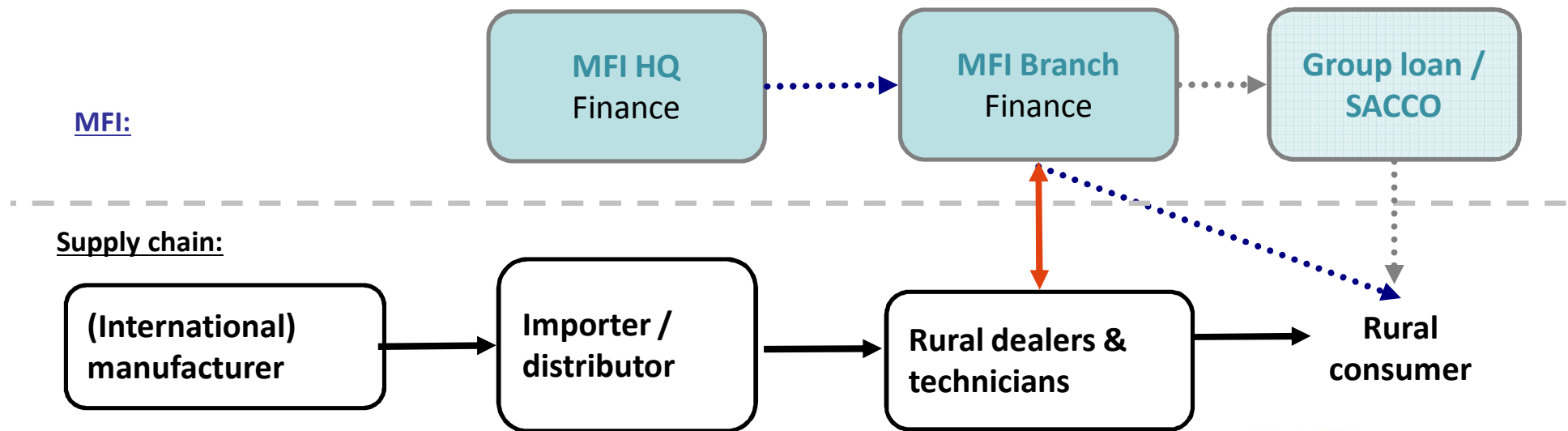


# Business models

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## “Branch-2-branch” model

Rural entrepreneurship





# Business models

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## “Branch-2-branch” model

Rural entrepreneurship

### What works?

- Loan officer incentives
- Joint promotion, referrals
- Continuous product training

MFI:

MFI HQ  
Finance

MFI Branch  
Finance

Group loan /  
SACCO

Supply chain:

(International)  
manufacturer

Importer /  
distributor

Rural dealers &  
technicians

Rural  
consumer

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# Donor funded projects

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## *Blue print business models*

- Grants conditional to business model (“WB recipe”)

*HQ-2-HQ*

## *Tailored business models*

- Context-specific interventions (*training of solar technicians, awareness campaigns, supporting rural energy companies, ...*)

*Branch-2-branch*

# TA for business models

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Temporary project support:

**Pull development of decentral  
business models:** Partner  
identification, defining roles, capacity  
building, service quality standards, loan  
structure

MFI:



Supply chain:



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# Discussion questions

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1. Where to start?
2. Need for dedicated “energy” loan products? Or loans differentiating the target group? *(is the risk in the technology or in the client?)*
3. Financing “non-renewable” energy access? *(existing markets of battery charging stations, mobile phone charging stations)*
4. Savings products for energy hardware?
5. (micro-insurance for climate change adaptation?)

# Many thanks !

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More information:  
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